UTAH CERTIFIED LABORATORIES APPROVED FOR UST ENVIRONMENTAL SAMPLE ANALYSIS FOR AROMATIC VOLATILES AND OIL & GREASE

All approvals limited to methods listed on current certification from the State of Utah

REVISED August 10, 2004

American West Analytical
463 West 3600 South
Salt Lake City, UT 84115
(801) 263-8686
(methods 1,2,3,4,5)

Applied Physics and Chemistry Laboratory
13760 Magnolia Ave
Chino, CA 91710
(909) 590-1828
(methods 1,2,3,4)

ATK Thiokol Environmental Laboratory
9160 North Highway 83
Brigham City, UT 84302
(435) 863-2437
(methods 1,2,3,4)

Columbia Analytical Services Inc.-Kelso
1317 South 13th Avenue
Kelso, WA 98626
(360) 577-7222
(methods 2,3,4)

DataChem Laboratories Inc.
960 West LeVoy Drive
Salt Lake City, UT 84123
(801) 266-7700
(methods 1,3)

Environmental Science Corp.
12065 Lebanon Road
Mt. Juliet, TN 37122
(615) 758-5858
(methods 1,2,3,4)

Enviropro Laboratories
2712 South 3600 West Suite E
West Valley City, UT 84119
(801) 964-2511
(methods 1,2,3,4)

Lancaster Laboratories Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17601-2425
(717) 656-2300
(methods 1,2,3)

Lionville Labs-PA
208 Welsh Pool Road
Lionville, PA 19341-1333
(610) 280-3000
(method 1,2,3,4)

STL-Denver
4955 Yarrow Street
Arvada, CO 80002
(303) 736-0100
(methods 1,2,3,4)

Severn Trent Laboratories-Houston
6310 Rothway
Houston, TX 77040
(713) 690-4444
(methods 1,2,3,4)

SPL (Southern Petroleum Laboratories-Scott)
500 Ambassador Caffery Parkway
Scott, LA 70583-8544
(318) 237-4775
(methods 1,2,3,4)

SPL (Southern Petroleum Laboratories-Houston)
8880 Interchange Drive
Houston, TX 77054
(713) 660-0901
(methods 1,2,3,4)

Utility Testing Laboratory
1615 West 2200 South Suite A
Salt Lake City, UT 84119
(801) 485-8941
(methods 1,2,3,4)

KEY

Current methods for which the laboratory is certified:

1. 8015b; 2. 8021b; 3. 8260b; 4. 1664; 5. Utah TPH Fractionation Method

Note: Laboratory certification status for the methods listed are subject to change without notice. Please ensure that the selected laboratory can meet your required analytical needs prior to your sampling event. Call the Division of Environmental Response and Remediation if you have sampling questions.

8015 B	8021 B	8260 B	1664	BTEXN/MTBE	TPH as GRO	TPH as DRO	O&G or TRPH	Solvents
AWAL	AWAL	AWAL	AWAL		8015 B	8015 B	1664	
Applied Physics and C	Applied Physics and C	Applied Physics and Ch	Applied Physics ar	8021 B				8021 B
ATK Thiokol Environm	ATK Thiokol Environm	ATK Thiokol Environme	ATK Thiokol Envir	8260 B	8260 B			8260 B
DataChem Laboratorie	Columbia Analytical Se	Columbia Analytical Se	Columbia Analytic					
Environmental Science	Environmental Science	DataChem Laboratories	Environmental Sci					
Enviropro Labs	Enviropro Labs	Environmental Science	Enviropro Labs					
Lancaster Laboratories	Lancaster Laboratories	Enviropro Labs	Lionville Labs-PA					
Lionville Labs-PA	Lionville Labs-PA	Lancaster Laboratories	STL-Denver					
STL-Denver	STL-Denver	Lionville Labs-PA	Severn Trent-Hous					
Severn Trent-Houston	Severn Trent-Houston	STL-Denver	SPL-Scott					
SPL-Scott	SPL-Scott	Severn Trent-Houston	SPL-Houston					
SPL-Houston	SPL-Houston	SPL-Scott	Utility Testing					
Utility Testing	Utility Testing	SPL-Houston						
		Utility Testing						

Laboratory*	TPH as GRO	TPH as DRO	BTEXN/MTBE	O&G or TRPH	Solvents
AWAL	X	X	X	X	X
Applied Physics and	X	X	X	X	X
ATK Thiokol Environ	X	X	X	X	X
Columbia Analytical	X		X	X	X
Datachem Labs	X	X	X		X
Environmental Scien	X	X	X	X	X
Enviropro Labs	X	X	X		X
Lancaster Laboratories	X	X	X	X	X
Lionville Labs	X	X	X	X	X
STL-Denver	X	X	X	X	X
Severn Trent- Housto	X	X	X	X	X
SPL-Scott	X	X	X	X	X
SPL-Houston	X	X	X	X	X
Utility Testing	X	X	X	X	X

Laboratory*	Gasoline	Diesel	Used Oil	New Oil	Unknown			
AWAL	X	X	X	X	X			
Applied Physics and C	X	X	X	X	X			
ATK Thiokol Environm	X	X	X	X	X			
Columbia Analytical S	X		X	X	X			
DataChem Laboratorie	X	X						
Environmental Scienc	X	X	X	X	X			
Enviropro Labs	X	X	X	X	X			
Lancaster Laboratorie	X	X						
Lionville Labs-PA	X	X	X	X	X			
STL-Denver	X	X	X	X	X			
Severn Trent-Houston	X	X	X	X	X			
SPL-Scott	X	X	X	X	X			
SPL-Houston	X	X	X	X	X			
Utility Testing	X	X	X	X	X			
* This list is subject to change without notice.								
It is the users responsibility to ensure that the laboratory used is certified for the methods required by the Executive Secretary (UST).								

Utah LUST Program Cleanup Levels

Updated Friday June 11, 2004

RISK-BASED CORRECTIVE ACTION (RBCA) TIER 1 SCREENING LEVELS (SLs) *These levels only apply when there are no buildings, property lines or utility lines within 30 feet of source, and no water wells or surface water within 500 feet of source area.*			RECOMMENDED CLEANUP LEVELS (RCLs) FOR SOIL and GROUNDWATER, and MAXIMUM CONTAMINANT LEVELS (MCLs) FOR GROUNDWATER *These levels apply when RBCA Tier 1 criteria are exceeded; i.e., if there are buildings, property lines or utility lines within 30 feet of source, or water wells or surface water within 500 feet of source area, or if the Tier 1 screening levels are exceeded.*	
CONSTITUENT	**Tier 1 SL Groundwater (mg/L)**	**Tier 1 SL Soil (mg/kg)**	**RCL/MCL Groundwater (mg/L)**	**RCL Soil (mg/kg)**
Benzene	0.3	0.9	0.005	0.2
Toluene	7	61	1.0	100
Ethylbenzene	4	23	0.700	70
Xylenes[1]	**10**	**23**	10	1000
Naphthalene[2]	**0.5**	**50**	0.02	2
Methyl t-butyl ether (MTBE)	0.2	0.3	0.07[3]	not available; use Tier 1 SL = 0.3
TPH-gasoline	10	1500	0.500[4]	30
TPH-diesel	10	5000	0.500[4]	100
Oil and Grease (TRPH)	10	10000	10.0[3]	300
Lead	not available; use MCL	not available; use RCL	0.015	100

[1] **Screening Levels are based on 2003 reference dose of 0.2 mg/kg-day (EPA IRIS database), and is 7 mg/L groundwater. However, the current federal and state MCL of 10 mg/L must be applied.**

[2] **Screening Levels are based on 1998 reference dose of 0.02 mg/kg-day (EPA IRIS database)**

[3] Not an MCL

[4] Not an MCL or RCL. Other applicable standard pursuant to R311-211 Cleanup Standards Policy

SITE ASSESSMENT

A site assessment must be performed for all UST closures and change-in-service. Site assessments must be performed as outlined in 40 CFR 280.72 and R311-205 (U.A.C.). If contamination is suspected, additional samples must be collected at the location where contamination is most likely to be present. If groundwater is encountered, a soil sample must be collected, in the unsaturated zone, in addition to each groundwater sample. Soil and groundwater samples must be analyzed for the compounds shown in the following table, using appropriate lab methods.

Substance or Product Type	Contaminant Compounds to be Analyzed for Each Substance or Product Type	ANALYTICAL METHODS[1] Soil, Groundwater or Surface Water
Gasoline	Total Petroleum Hydrocarbons (purgeable TPH as gasoline range organics C_6 - C_{10})	EPA 8015B or EPA 8260B
	Benzene, Toluene, Ethyl benzene, Xylenes, Naphthalene, (BTEXN) and MTBE	EPA 8021B or EPA 8260B
Diesel	Total Petroleum Hydrocarbons (extractable TPH as diesel range organics $C_{10} – C_{28}$)	EPA 8015B
	Benzene, Toluene, Ethyl benzene, Xylenes, and Naphthalene (BTEXN)	EPA 8021B or EPA 8260B
Used Oil	Oil and Grease (O&G) or Total Recoverable Petroleum Hydrocarbons (TRPH)	EPA 1664A or EPA 1664A (SGT*)
	Benzene, Toluene, Ethyl benzene, Xylenes, Naphthalene (BTEXN) & MTBE; and Halogenated Volatile Organic Compounds (VOX)	EPA 8021B or EPA 8260B
New Oil	Oil and Grease (O&G) or Total Recoverable Petroleum Hydrocarbons (TRPH)	EPA 1664A or EPA 1664A (SGT*)
Other	Type of analyses will be based upon the substance or product stored, and as approved by the Executive Secretary (UST)	Method will be based upon the substance or product type
Unknown	Total Petroleum Hydrocarbons (purgeable TPH as gasoline range organics C_6 - C_{10})	EPA 8015B or EPA 8260B
	Total Petroleum Hydrocarbons (extractable TPH as diesel range organics $C_{10} – C_{28}$)	EPA 8015B
	Oil and Grease (O&G) or Total Recoverable Petroleum Hydrocarbons (TRPH)	EPA 1664A or EPA 1664A (SGT*)
	Benzene, Toluene, Ethyl benzene, Xylenes, and Naphthalene (BTEXN) and MTBE; and Halogenated Volatile Organic Compounds (VOX)	EPA 8021B or EPA 8260B

[1] The following modifications to these certified methods are considered acceptable by the Executive Secretary (UST):

- Dual column confirmation may not be required for TPH and BTEXN/MTBE analysis.
- A micro-extraction or scale-down technique may be used for aqueous samples, but only for the determination of extractable TPH as diesel range organics ($C_{10} – C_{28}$).
- Hexane may be used as an extraction solvent.
- *Silica Gel Treatment (SGT) may be used in the determination of Total Recoverable Petroleum Hydrocarbons.

NOTE: The sample preparation method and any modification(s) to a certified method must be reported by the laboratory.